## JC20 Rec'd PCT/PTO 20 JUN 2005

PATENT Docket No. 32860-000900/US ~

#### IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant(s):

Walter GUMBRECHT et al.

Int'l Application No.:

PCT/DE2003/004136

Application No.:

**NEW APPLICATION** 

Filed:

June 20, 2005

For:

METHOD AND DEVICE FOR PCR-AMPLIFICATION AND

**DETECTION OF NUCLEOTIDE SEQUENCES** 

# INFORMATION DISCLOSURE STATEMENT (SUBMISSION CONCURRENT WITH THE FILING OF A NEW PATENT APPLICATION)

Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22314 Mail Stop PCT

June 20, 2005

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

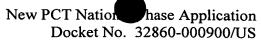
#### I. <u>LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION</u>

The patents, publications, or other information submitted for consideration by the Office are listed on PTO-1449, attached hereto.

#### II. COPIES

Submitted herewith is a legible copy of (i) each U.S. and foreign patent; (ii) each
publication or that portion which caused it to be listed; and (iii) all other information
or that portion which caused it to be listed.

This application is a National Phase of a PCT application. All of the documents listed on the PTO-1449 are not enclosed because they were cited in the International Search Report and copies should be forwarded from the International Search Authority. If copies are needed, please contact the undersigned.



	Because the present application is being filed after June 30, 2003, no copies of the U.S. patents or U.S. patent application publications which are listed on the attached Form 1449 are enclosed pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i). Any foreign patent documents or non-patent literature listed on the attached Form 1449 are enclosed herewith.					
III.			(PLANATION OF THE RELEVANCE tone box)			
	a.		DOCUMENTS IN THE ENGLISH LANGUAGE			
			The attached patents, publications, or other information in the English language do not require a statement of relevancy.			
	b.	$\boxtimes$	DOCUMENTS NOT IN THE ENGLISH LANGUAGE			
			A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows:			
			Many of the documents have been discussed in the PCT Search Report, the PCT Preliminary Examination Report, and/or throughout the specification. The PCT Search Report and German translation aid translating key terms into English, indicate the degree of relevance found by the PCT Office, thereby satisfying the requirement for a concise explanation. See MPEP 609(A)(3).			
	c.	$\boxtimes$	ENGLISH LANGUAGE SEARCH REPORT			
			An English language version of the search report or action that indicates the degree of relevance found by the foreign office is attached, thereby satisfying the requirement for a concise explanation. See MPEP 609(A)(3).			
	d.		OTHER			
			The following additional information is provided for the Examiner's consideration.			

International Search Report, International Preliminary Examination Report and German Translation Aid.

## 10/539437 JC20 Rec'd PCT/PTO 2 0 JUN 2005

New PCT National Phase Application Docket No. 32860-000900/US

#### **FEES**

This Information Disclosure Statement is being filed concurrently with the filing of a new patent application; therefore, no fee is required.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule and charge the appropriate fee to Deposit Account No. 08-0750.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY & PIERCE, P.L.C.

By:

onald J. Daley, Reg. No. 34,31

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Reston, Virginia 20195

(703) 668-8000

Enclosures:

DJD/smk

Form PTO-1449(s)

Documents

Foreign Search Reports

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				Application Number	Me Application	
INFO	RMATION I	DIS	CLOSURE	Filing Date	June 20, 2005	
STATEMENT BY APPLICANT			PPLICANT	First Named Inventor	Walter GUMBRECHT et al.	
				Art Unit	Unknown	
(	use as many sheet	s as r	necessary)	Examiner Name	Unknown	
Sheet		of		Attorney Docket Number	32860-000900/US	

	U.S. PATENT DOCUMENTS							
Examiner	Cite	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant			
Initials *	No.	Number - Kind Code <sup>2</sup> (if known)		Cited Document	Passages or Relevant Figures Appear			
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	FOREIGN PATENT DOCUMENTS  Foreign Patent Document  Name of Patentee or Pages, Columns, Lines,								
Examiner Initials*	Cite No.1	Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Applicant of Cited  Document	Where Relevant Passages or Relevant Figures Appear	T⁵			
	1	WO 00/62036 A	19-10- 2000	Nanogen/Becto n Dickinson Partnership					
	2	WO 00/60919 A							
	3	WO 00/58522 A	05-10- 2000	Nanogen Inc.					
	4	WO 01/34842 A2	17-05- 2001	University of Chicago					
	5	DE 196 10 115 G2	18-09- 1997	Fraunhöfer- Gesellschaft zur Förderung der angewandten Forschung eV		×			
	6	WO 01/42508 A2	14-06- 2001	Motorola, Inc.					
	7	WO 99/36576 A1	22-07- 1999	Packard Bioscience Company					
	1								

Examiner Signature	Date Considered	

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.



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Substitute for form 1449A/PTO Complete<u>i</u>f <u>Kno</u>wi **Application Number** INFORMATION DISCLOSURE Filing Date STATEMENT BY APPLICANT Walter GUMBRECHT et al. First Named Inventor Unknown Group Art Unit Unknown (use as many sheets as necessary) **Examiner Name** 32860-000900/US Sheet Attorney Docket Number

OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS						
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2			
	8	Fuchs et al: "A silicon lab-on-chip for integrated sample preparation by pcr and dna analysis by hybridization" Annual International IEEE-EMBS special topic conference on microtechnologies in medicine and biology. Proceedings, XX, XX, 2.5.2002, S. 227-231, XP001180969				
	9	Hodko D et al: "Detection of pathogens using on-chip electrochemical analysis of pcr amplified dna molecules", Proceedings of the Spie, Spie, Bellingham, VA, US, Bd. 4265, 25.01.2001, S. 65-74, XP008000573				
	10	Sosnowski R G et al: "Rapid determination of single base mismatch mutations in dna hybrids by direct electric field control" Proceedings of the national academy of sciences of USA, National Academy of Science, Washington, US, Bd. 94, Februar 1997, S. 1119-1123, XP000857636				
	11	Gilles P N et al: "Single nucleotide poymorphic discrimination by an electronic dot blot assay on semiconductor microchips" Nature Biotechnology, Nature Publishing, US, Bd. 17, April 1999, S. 365-370				
	12	Tillib SV, Strizhkov BN, Mirzabekov AD, Datenbank PubMed bei NCBI, Anal. Biochem. (2001) 292 (1) 155-60				
-	13	Dubiley, S. u.a.: Polymorphism analysis and gene detection by minisequencing on an array of gel-immobilized primers, Nucleic Acids Research, 1999, Vol. 27, No. 18, e19, 1-6				
	14	Strizhkov, B.N. u.a.: PCR amplification on a microarray of gel-immobilized oligonucleotides: detection of bacterial toxin- and drug-resistant genes and their mutations. Biotechniques (2000) 29 (4) 844-8, 850-2, 854				
	15	Kolchinski, A. & Mirzabekov A.: Analysis of SNPs and other genomic variations using gel-based chips, Hum Mutat. (April 2002) 19 (4) 343-60				
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<sup>1</sup> Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.